



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------------|------------------|
| 10/510,431 | 07/07/2005 | Daniel Santhouse | 884.0158USU | 8530 |
| 27623 | 7590 | 09/04/2007 | | |
| OHLANDT, GREELEY, RUGGIERO & PERLE, LLP ONE LANDMARK SQUARE, 10TH FLOOR STAMFORD, CT 06901 | | | EXAMINER RINEHART, KENNETH | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3749 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 09/04/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--|--|--|
| Office Action Summary | Application No. 10/510,431 | Applicant(s) SANTHOUSE, DANIEL | |
| | Examiner Kenneth B. Rinehart | Art Unit 3749 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, 25-34 is/are rejected.
- 7) ☒ Claim(s) 22-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>10/6/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the said casing is selectively removable from said housing must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3749

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9,11,20,21,and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Harris et al (6,393,718). Harris et al shows a housing (fig. 1), one or more ion generators, one or more ion emitters, situated adjacent to but outside the housing (col. 2, lines 11-16), form an ion concentration outside said housing and at a distance from a user's hair (col. 2, lines 11-16), said hair is encompassed by said ion concentration (col. 2, lines 2-4), at least one blower (fig. 2), at least one aperture (fig. 2), ion emitters situated at a distance from said airflow (fig. 1), said at least one attachment for cooperating with said air outlet to manipulate said airflow (8, 9, fig. 1), said at least one attachment is configured to variably control aeration of said positive and negative ions into said airflow (8, 9, fig. 1), said at least one blower alters said airflow velocity, thereby controlling aspiration of said positive and negative ions into said airflow (8, 9, fig. 1), said one or more ion emitters are positioned in a casing formed on said housing (fig. 1), said ion emitters are arranged to generate a predictable area of concentrated ions and to minimize any dilution resulting from direct exposure to said airflow (col. 3, lines 53-55), providing a device having a housing with at least one air outlet disposed therein (fig. 1), a blower for generating an airflow stream (fig. 2), one or more ion generators, and one or more ion emitters disposed outside, but adjacent said housing and spaced a distance from said airflow exiting said air outlet (23, 24, fig. 2); applying said blower generated airflow toward said hair for drying and/or styling; and generating an ion concentration having a certain area and spaced a certain distance from said airflow to minimize any dilution resulting from direct

exposure to said airflow (col. 3, lines 53-55).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-19, 27-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris et al (6,393,718). Harris et al discloses a housing (fig. 1), one or more ion generators, one or more ion emitters, situated adjacent to but outside the housing (col. 2, lines 11-16), said one or more ion emitters are positioned in a casing formed on said housing (fig. 1), providing a device having a housing with at least one air outlet disposed therein (fig. 1), a blower for generating an airflow stream (fig. 2), one or more ion generators, and one or more ion emitters disposed outside, but adjacent said housing and spaced a distance from said air flow exiting said air outlet (23, 24, fig. 2); applying said blower generated airflow toward said hair for drying and/or styling ; and generating an ion concentration having a certain area and spaced a certain distance from said airflow to minimize any dilution resulting from direct exposure to said airflow (col. 3, lines 53-55). Harris et al discloses applicant's invention substantially as claimed with the exception of said casing is selectively removable from said housing, said ion emitters are formed from a conductive metal, conductive polymer, conductive silicon, said ion emitters form an array, said ion emitters create an ion concentration having a negative polarity, positive polarity, both a positive and a negative polarity. At the time the invention was made it

Art Unit: 3749

would have been an obvious matter of design choice to a person of ordinary skill in the art to have the said casing is selectively removable from said housing, said ion emitters are formed from a conductive metal, conductive polymer, conductive silicon, said ion emitters form an array, said ion emitters create an ion concentration having a negative polarity, positive polarity, both a positive and a negative polarity because applicant has not disclosed that the type of material, shape of the array, or polarity of the ion concentration or separability provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the material, shape, polarity or integral nature of Harris or the claimed material, shape, and polarity because both materials, shapes, polarities, and parts perform the same function of drying equally well.

Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris et al (6,393,718) in view of Kata et al (4,039,774). Harris et al discloses a housing (fig. 1), one or more ion generators, one or more ion emitters, situated adjacent to but outside the housing (col. 2, lines 11-16), said one or more ion emitters are positioned in a casing formed on said housing (fig. 1), providing a device having a housing with at least one air outlet disposed therein (fig. 1), a blower for generating an airflow stream (fig. 2), one or more ion generators, and one or more ion emitters disposed outside, but adjacent said housing and spaced a distance from said air flow exiting said air outlet (23, 24, fig. 2); applying said blower generated airflow toward said hair for drying and/or styling ; and generating an ion concentration having a certain area and spaced a certain distance from said airflow to minimize any dilution resulting from direct exposure to said airflow (col. 3, lines 53-55). Harris et al discloses applicant's invention substantially as claimed

Art Unit: 3749

with the exception of said casing is selectively removable from said housing. Kata teaches said casing is selectively removable from said housing (fig. 3, 9, col. 4, lines 29-37) for the purpose of ease of manufacture and repair. It would have been obvious to one of ordinary skill in the art to modify Harris by including said casing is selectively removable from said housing as taught by Kata for the purpose of ease of manufacture and repair.

Claims 10 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris et al in view of Lee et al (6,640,049). Harris et al discloses a housing (fig. 1), one or more ion generators, one or more ion emitters, situated adjacent to but outside the housing (col. 2, lines 11-16), said one or more ion emitters are positioned in a casing formed on said housing (fig. 1), providing a device having a housing with at least one air outlet disposed therein (fig. 1), a blower for generating an airflow stream (fig. 2), one or more ion generators, and one or more ion emitters disposed outside, but adjacent said housing and spaced a distance from said air flow exiting said air outlet (23, 24, fig. 2); applying said blower generated airflow toward said hair for drying and/or styling ; and generating an ion concentration having a certain area and spaced a certain distance from said airflow to minimize any dilution resulting from direct exposure to said airflow (col. 3, lines 53-55). Harris et al discloses applicant's invention substantially as claimed with the exception of one or more ion generators are configured to provide a variety of voltage outputs, as well as to generate combinations of positive and negative ions. Lee et al teaches one or more ion generators are configured to provide a variety of voltage outputs, as well as to generate combinations of positive and negative ions (abstract) for the purpose of promoting grooming and rapid drying of users hair. It would have been obvious to one of ordinary skill in the art to modify Harris et al by including one or more ion generators are configured to provide a

Art Unit: 3749

variety of voltage outputs, as well as to generate combinations of positive and negative ions as taught by Lee et al for the purpose of promoting grooming and rapid drying of users hair so that time savings are achieved.

Allowable Subject Matter


Claims 22-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to apparatus in general: Larson (4039774), Kaizukz (5957090), Ikemoto (5150491), Fong (4797966), Gueret (4,500,939), Secker (3,997,817), Anderson (3892247), Ramchandani (6191930), Mailand (5805406), Prehodka (5612849), Rodrigo (5388,769), Partridge (5055963), Cantelli (4258408).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B. Rinehart whose telephone number is 571-272-4881. The examiner can normally be reached on 7:20 -4:20.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven McAllister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


KENNETH RINEHART
PRIMARY EXAMINER

Art Unit: 3749

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kbr


KENNETH RINEHART
PRIMARY EXAMINER